ACQUAPAZZA

ACQUAPAZZA
SONY α7 Series of Underwater Housings

APSO-A7
Underwater Housing User Manual

Thank you for purchasing our product.

Please be sure to keep this manual and the warranty certificate Inside the packaging and store in an easily accessible place.

2015 ACQUAPAZZA Printed in Japan
http://acquapazza/jp/

IMPORTANT! PLEASE READ

・To prevent flooding of the ACQUAPAZZA Underwater Housing, the back door where the digital still camera is inserted and removed is sealed with a double O-ring seal.
(For brevity purposes, we will hereafter refer only to "housing" and "camera.")
Before shipping a crucial seal pressure test is conducted, but it does not remove the risk of water entering the housing.

・In order to maintain proper functioning, including resistance to flooding, it is essential that the customer conduct his own maintenance both before and after use, as well as correct storage and returning the housing to this company for periodic overhaul.

・A thorough reading of the entire manual and an understanding of the product, its proper use and maintenance will allow you to enjoy it for years to come.
(For camera instructions, please consult the camera user manual.)

・In the case of a malfunction of this product, we will adjust or repair the product to its proper function;
however, under no circumstance will we take responsibility for broken products, flooding of the camera, the lens, peripheral attachments, loss of photo opportunity, disappointed memories, and/or necessary fees and expenses.

・In case of a need to minimize risk on loss of the camera and housing, we strongly recommend that the customer obtain diver's insurance or an insurance policy from a reputable company that will cover flood damage.

・Each housing made by ACQUAPAZZA is milled in 3D from corrosion-resistant aluminum. During the process, it is possible that tiny imperfections, such as slight color inconsistencies, or differences in color of the outside of the housing may occur. This is proof that each housing is individually produced; please understand we cannot entertain any claims about the appearance of the product.

・Please be aware that the camera being used in your housing may to a greater or lesser extent show signs of scratches, dirt or other damage.

・ The housing is coated in colorful alumite. The more vibrant the color, the more susceptible to fading in the sun. We recommend keeping the housing out of sun, and be aware that places where your hands touch the housing repeatedly, the color may were off.
(Some users can keep the product pristine for more than five years. Those who use it weekly may notice some color fading after a year, while professionals may notice fading within six months.)

FOR YOUR SAFETY

ACQUAPAZZA has taken great pains to design a safe product, but improper use carries a risk of personal injury. To prevent such a risk, please always adhere to the following instructions.
(From this point on in this user manual, in order to make necessary instructions clear and easy to understand, we will abbreviate the use of extensive polite language.)

・Read and understand the contents of this manual and for your safety always follow the precautions.

・Do not use the housing in a harsh environment for which it was not intended.

・In case of malfunction, stop using the housing and return it to this company for repair.
(In the case of flooding, be aware that when the housing is opened, water may erupt violently, so take care not to have it get in your eyes, or splash on surrounding areas or to get your hand caught.)

・Please do not leave your housing in the reach of children, for fear of the housing falling on them, or getting the strap wrapped around their neck or swallowing of small parts of the housing.

・Take care not to catch your hand between the sections of the housing.

・Do not submit the objective glass on the front of the housing to shock. (It may shatter and result in personal injury.)

・The corners of this product may have sharp edges. To prevent injury, please use caution when handling.

PRECAUTIONS DURING USE

・Do not throw the housing into the water, and when diving off a boat, prevent damage to the housing by entering the water with the housing.

・Do not use the housing in the following situations:
Temperatures below 0°C or above 40°C; in sandy areas or in areas of blowing dust; in a vacuum or nearly a vacuum air pressure situation.

・Be careful not to let extraneous types of liquids come in contact with the acrylic portions of the housing or the O-rings.

・Do not drop or allow the housing to fall. Depending or which area is affected water tightness or pressure seal properties may be compromised. Please consult with the store where (the product was) purchased or customer support.

・After flying on an airplane, the difference in air pressure may make the housing difficult to open. It is a good idea to use a resin or a plastic spacer to keep a crack open and prevent the back door from sealing tight.

・Force in excess of normal use on the shutter lever, focus knob, dials and function buttons, etc. can cause these parts to break. Additionally, damage may be caused to the camera. The user is urged not to put excessive force on these parts.

・In transport, cushion the housing so that it will not take vibrations directly.
(Placing the housing directly into the trunk of a car and submitting it to long hours of vibration can cause the screws to loosen and can cause scrapes and scars. The housing should be wrapped in a thick layer of cushioning and stored in a shock-proof case.)

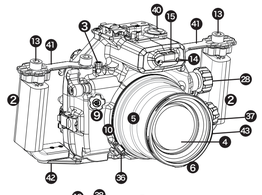
・If, while diving or immediately afterwards, you notice droplets or small amounts of water inside the housing, stop using it and contact ACQUAPAZZA Customer Support. (This is not necessary for water droplets that may get inside in opening or closing the housing.)

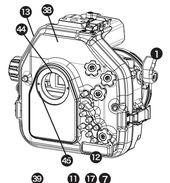
・To the internal thread, the user should not be screw in more than useful length. If screw in, a hole will be opened and flooded in housing.

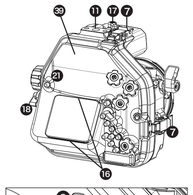
・The user must not loosen the screw to which seal liquid adhered, or must not tighten it.

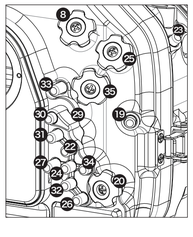
・When taking off the cover to the housing and setting it on a hard surface, remember that the mode toggle is extended and may become bent if downward force is applied to the cover. Before setting the cover down retract the toggle outside. (The quick shoe also protrudes from the cover and may be bent as well. It is recommended not to put downward force on the cover.)

PART NAMES









1. Trigger-shaped shutter release
2. Adjustable grip set (2 parts)
3. Power button
4. Objective glass
5. 2870 Port MB
6. M67 adaptor mount
7. Buckle (3 places)
8. Mode dial
9. Front dial
10. Port mount
11. Mount base
12. Extension key (playback button)
13. Hole for attaching the ball joint (4 places)
14. Screw for attaching sync cord adaptor
15. Sync cord adaptor
16. Monitor hood rail
17. ON/OFF knob for interior strobe light
18. Knob for Tilt Monitor lever
(only for use with the slant cover; cap for flat cover)
19. MOVIE button
20. Control wheel
21. Menu button
22. Display button
23. C1 button
24. Run button
25. Exposure correction knob
26. Delete button /C3 button
27. Continuous shutter release button
28. Gear knob
29. AF/MF/AEL Switch lever
30.ON button
31.Fn button
32. Select bellow button
33.C2 button
34.WB button
35. Rear dial
36. Boat lock
37. Focus knob
38. Flat cover
39. Slant cover
40. Accessory port (2 places)
41. Stay (2 places)
42. Right adaptor
43. Left adaptor
44. Finder hole
45. Pin hole for positioning finder hole

HOW TO MOUNT AN MB PORT (MB stands for "Medium Bayonet")

1. Choose the port you wish to use. (MB Port System)

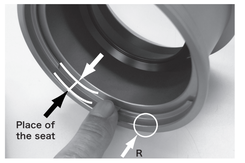
Because the port is specially made to accommodate only certain lenses, if you try to use it with other lenses,
- The quick shoe will not fit in properly,
- Your photograph will show vignetting in the corners,
- The attachment lens will not function,
- And the edges of the photo will streak.

2. Run your finger along the O-ring of the port mount MB to confirm there are no unusual aspects.
The O-ring should feel smooth.
(For additional information please consult the separate O-ring manual.)

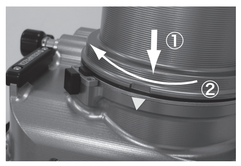
3. Check the lubrication (if the O-ring feels dry, apply the enclosed grease.)
(For additional information please consult the separate O-ring manual.)

4. Check that the MB port seat for the O-ring is clean.
Any dirt or foreign materials must be removed
(For additional information please consult the separate O-ring manual.)

Take care not to cut yourself on the bayonet cutout.

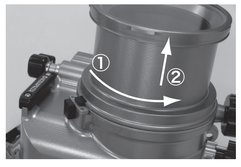


5. Attach the port to the body.
Around the base of the port you will see a cutout mark. Line this mark up with the arrow mark on the lower half of the housing body.
(Be careful not to cause the part labeled as "R" in the above diagram to strike the port mount. If the "R" part is scratched by impact, the O-ring may also be damaged.)



・Gently push down on the port edge to the port mount and then turn the port.

・Turn the port clockwise about 20 and the lock button will engage.



6. To remove the port, push down on the lock button and turn the port the opposite direction about 20.

CAUTION

If you leave the housing closed in hot weather, the inside air gets warm and expands.
If you open the cover then, the expanded air gets out quickly and the inside air results in less dense. Do not close the housing in such situation, since less dense air in the housing causes a significant drop in pressure and leads to water leakage.

ABOUT FOGGING IN THE HOUSING

・When setting up your housing in hot humid climates, the temperature underwater could be 10 cooler (roughly) which can cause the inside of the housing to fog up.
(Take care the room that the humidifire is disposed and the temperature is high in winter season, and the humid day.)

・When setting up your housing during the summer, we strongly suggest doing so in an outside area with no moisture from air conditioning exhaust and no dust flying.

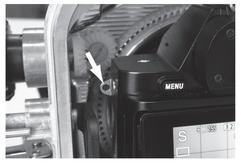
・Fogging may also occur when the housing is flooded and there is water inside.

・The housing will cloud up if the sponge is wet as well, so be sure to dry the sponge out before use.

ATTACHING THE VIEWFINDER

- When attaching the viewfinder, you must have a threaded ring.
- You will need special tools to attach the viewfinder (However, using something such as two ballpoint pens to screw it in is acceptable. Be sure to check occasionally that it hasn't come loose.
- Do not carry the housing around by the viewfinder instead of the grip.

SETTING UP TO MOUNT YOUR CAMERA IN HOUSING



1. It interferes with the tilt arm so please remove it.
Be aware that occasionally you may not notice the interference as you insert/remove the camera.

2. Detach the iPad.

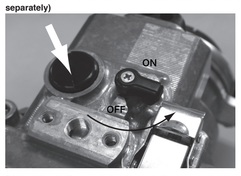
ATTACHING THE EXTERNAL FLASH HVL-F20M (Sony)

1. Attach the strobe (after inserting batteries.)

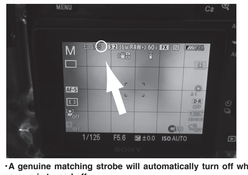
2. Lock the strobe to prevent it falling off due to vibrations, etc.

3.After attaching the strobe to the housing, turn the strobe on using the ON/Off toggle.

4. The strobe can also be powered using a Nikonos V pin with the M14 accessory sync cord port (bulkhead receptacle – sold separately)



5.When the battery is fully charged, the orange-lighted icon will flash a number of times.



・A genuine matching strobe will automatically turn off when the camera is turned off.
・However, if the top strobe ON/OFF toggle is turned to the ON position, the strobe will turn on, and if left that way it will drain your AAA batteries.
・Mechanical vibration can cause the unit to turn on. Users are urged to check regularly that the unit and its matching strobe are both OFF.

SETTING UP YOUR CAMERA

In setting up your camera and housing, pick an cool environment with low humidity.
(In summer pick a place away from air conditioning exhaust vents and in winter a place with no precipitation and temperatures above freezing.)

1. Insert the battery.
(To assure you don't miss that photo op, be sure your battery is fully charged.)

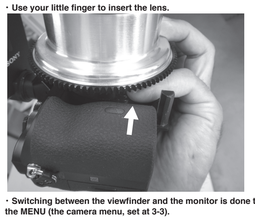
2. Insert the memory card.
(To assure you don't miss that photo op, make sure it has enough storage left for your photos.)

3. Set your camera setting.
(For camera instructions, please consult the camera user manual.)

4. Remove the lens cap, check for dirt on the lens.

5. After attaching a genuine matching strobe, always do a test flash to assure the strobe is firing before turning the strobe to OFF (hopefully with a fully-charged battery).

・Use your little finger to insert the lens.

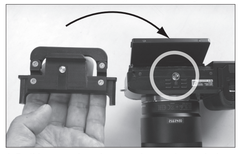


・Switching between the viewfinder and the monitor is done through the MENU (the camera menu, set at 3-3).

PREPARING THE HOUSING

Quick Shoe (a device to connect your camera to the housing)
The Quick Shoe is attached with three tripod screws.

The Quick Shoe in place.
Sometimes it dose not stand vertically, because it is a jaming section and also a presed part.

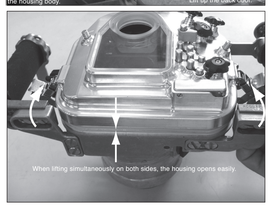


1. Do this on a safe and secure place such as a desk.
(not shaky, not dirty, not hot or humid)

2. Turn off the power to the camera.

3. Opening the housing
・Open the three latches.
・Use the following procedure so that you can use the latches to lift off the back door of the housing.

Once the latches have been opened, raise the lid snaps off the corresponding hooks on the door and lay them against the housing body.
Lift up the back door.

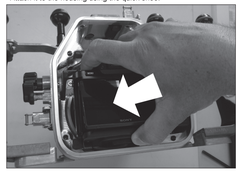


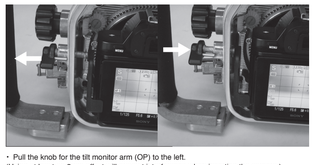
4. Check to make sure the objective glass in the port is clean both inside and out.

5. Insert the camera.
・Attach the gear and MF band A to the lens barel (Optional)

・Turn the power switch on the housing body to OFF:
(When the power switch is in the ON position, the angle is different, and parts may become distorted when inserted into the housing.)
Try flipping the ON/OFF toggle to determine if it is properly positioned.

・Attach it to the housing using the quick shoe.

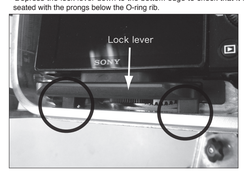




・ Pull the knob for the tilt monitor arm (OP) to the left.
(Using at least an 8mm offset will prevent interference when inserting the camera.)
・ Check that the teeth on both the bevel gear and the F-Z gear engage, when attaching the gear.
(If can happen that the F-Z gear will ride up on the bevel gear and will not move.)

・ Be sure that the front edge of the lens is properly seated in the lens guide at the front of the port.
(If the quick shoe is not positioned properly, the lens may not seat properly in the lens guide.)
(All ports except the special dome port are fitted with lens guides.)

・ Make sure the Quick Shoe is seated properly and then lock the lock lever.
(Check that it is in its proper position.)
・ Depress the lock lever down to the bottom edge to check that it is properly seated with the prongs below the O-ring rib.



・ Return the tilt monitor arm to a 0-angle and reposition it from the offset. (Optional)
・ Make sure that the strobe is clamped in place by the claws on the strobe' s ON/OFF lever.

・ Make sure you can change the angle to any angle you please.
・ Return the tilt monitor to a 0-angle.

6. CLOSE THE COVER
・ Before closing the housing, confirm that there are no particles in between the O-ring and the seal.
・ If necessary, apply grease to the secondary O-ring by the buckle.
(It is possible for an O-ring to become twisted so proper lubrication is critical.)
・ Evenly press down on the cover as far as you can. (The O-ring will resist and try to push back.)
・ Raise the lid snaps of the three latches so that they loosely catch on the corresponding hooks on the coverr.
・ Close the two latches on either side of the housing.
・ Close the latch on top.
・ Check to make sure that there are no gaps anywhere between the cover and the housing body.
・ To check if the cover is properly seated, see if the AF/MF toggle pushes the appropriate button inside. Occasionally the camera is being pushed so please move the toggle to the farthest extent possible to situate it in the proper position.

CHECK LIST WHEN USING AN EXTERNAL STROBE

・ Check the attachments for the arm, external strobe and the LED lights.
・ Be sure A2-hole rubber bashig and the sync cord itself are all attached.
・ When attaching the sync cord connector, adaptor to the unit, using too much pressure can break the urethane M3 screws, so attach it gently. Also do not frequently put them on or take them off.
(We use urethane screws because stainless steel has a possibility of electrolyzing, and long screws might puncture the housing.)
・ Putting a little grease on the screws used to attach them will make those screws easier to unscrew.
(Concerning use of the polycarbonate screws enclosed: SUS screws are susceptible to electrolytic corrosion, and they are longer than the enclosed screws; therefore, when such screws are used there is a real fear of producing a hole in the housing. such screws must never be used.)
・ Check that the screws used to attach an external strobe to the NEXSN are not loose.
(When loose, it may take the strobe an extremely long time to recharge.)
・ Be sure the sync cord is not broken or separated.
(If the fiberoptic cable is twisted in an unnatural manner and the sync cord is being compressed, it makes it difficult for the strobe to receive the communication to fire.)

AFTER TURNING ON THE POWER SWITCH

・ Be sure you have enough battery power.
・ Be sure you have enough memory.
・ Choose your shooting mode: A, S, P, or M
・ Already inspected strobes (INON, Inc. S-2000, D-2000, Z240,Inc.SEA&SEA,YS-D1)
・ Check that the strobe is ON/OFF by using the ON/OFF toggle on the outside.
(If the strobe is ON and fully charged, the orange icon on the monitor will flash several times.)
・ Turn on both the internal and external strobes and do one test fire to see if they are communicating properly

Once you have completed all the checks above, then you are ready to go.

THE CAUTION IN THE CASE OV MOVING WITH A CART.

・ Vibration can damage the camera inside so we strongly suggest carrying the unit by hand.

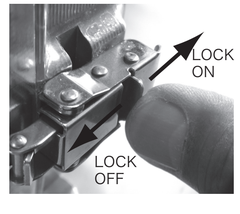
・ During transport keep the housing out the direct sun. (Put it in the shade so that the interior temperature does not rise.)

CHECK LIST BEFORE ENTERING THE WATER.

・ Do the teeth on both the focus gear and the zoom gear engage?
(During handling of the housing the adaptor may slip out of position on the lens.)

・ Is your strobe flashing?

・ This is perhaps because the latches have not been fully locked. If not properly locked, The housing may open, so the first place to check would be the locks on the latches.



POST DIVING MAINTENANCE

1. Wash the housing by sloshing it up and down at least five times in a rinse tank of clean water; when doing this take care not to knock it into other housings in the rinse tank.
(Stop occasionally both in the water and out of the water to allow water and air to enter grooves and rinse them out to rinse it in the moving water.)

2. Using a gentle flow of water from a hose, be sure to carefully wash all salt out of the push button glands and the control knobs.
(Strong water pressure can raise the risk of a flood, so apply water pressure only enough to reach inside the mechanism but not break the gland.)

3. Soaking the unit in a water tub for only an hour will not remove all the salt. The dive operators provide fresh water tubs as a courtesy only.

4. After returning to your home, remove the camera from the housing, reseal it and allow it to soak for at least ten hours in in a large container of room-temperature fresh water.
(If the housing is allowed to dry with salt remaining, the salt may crystalize and cut into metal fittings or O-rings, causing damage.)

5. Remove the housing from the water and dry it off
(Wipe the housing with a towel or cloth and allow to dry in a place out of the sun.)

6. Remove the port from the housing body, take off any water drops or salt, grease the port screws and put it away.

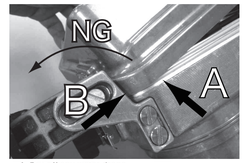
TAKING THE CAMERA OUT

1. Turn off the camera.

2. Open the cover to the housing.
Whenever removing the cover of the housing, take care not to try to wrench it off when it is caught between the grip adaptor and the O-ring rib.

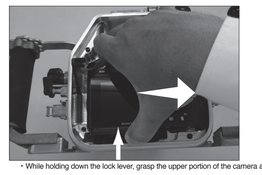
A. If the cover gets into the O-ring groove, the O-ring may be severed or the O-ring rib damaged. Be extremely careful.

B. It is also possible that the back door and/or the grip adaptor will be damaged.



3. Dry off any water drops.
When opening the cover, some water may spray out from the gap between the O-ring and the O-ring groove. If any droplets spray into the inside of the housing, wipe them away with a tissue or soft cloth.

4. Remove the tilt monitor back door from the monitor, set the lever to offset.



・ While holding down the lock lever, grasp the upper portion of the camera and pull out.

・ Take great care not to drip water from yourself (your hair, your wetsuit, your hands). Getting salt on the camera is to be avoided at all costs.

・ If water droplets are adhering to the glass, use a clean, soft cloth to dry them off.
(If you leave the drops on, they will dry into waterspots.)

ADDITIONAL MAINTENANCE

・ Only use a dry cloth or tissue to wipe out the inside of the housing.

・ Small bits of rubber shavings from the glands around parts like the mode toggle can pile up, in which case, use a vacuum cleaner or turn the housing body and the cover upside down and clean them with a dry brush or cotton swab.

・ Never use solvents such as paint thinner or benzene, or hydrocarbons (alcohols, etc.) because these substances will damage the polycarbonate and the O-rings.

・ Clean the window (both inside and out) for the internal strobe. If this window becomes clouded, the optical signal may not be received. (It is difficult to see whether the strobe connector and the adaptor are properly mounted, so it is a good idea to take them apart and check at least once a year.)

・ If salt crystals form, wipe them away and if dust or particles have gotten inside the housing, use a vacuum cleaner to get them out.

・ As a last resort, wash the inside of the housing in water.
(In that case, using it without it being completely dry will cause it to fog up.)

・ During maintenance, to make it easier to screw in elements corroded by salt , we recommend using a dab of the enclosed grease about ½ the size of a grain of rice on the M67 threads.

・ Take care not to overtighten the screws that connect the strobe cable adaptor. These parts are made from polycarbonate and are weak. Once the screws have been adequately tightened, use of further force will break them and cause you to be unable to attach the strobe cable adaptor to your housing.

・ Salt corrosion can damage every part of a housing.
Using a gentle flow of water from a hose, be sure to carefully wash all salt out of the small crevices around the push button glands and control knobs. Then while holding the housing underwater, push each button three times. Then let the housing rest in the rinse tank for more than ten hours to ensure all the salt is removed.

OPTIONS

●1635 Extension MB (with focas knob)

●2870 port MB (with focas knob)
(Close-up lens is available because it is flat port.)

●2470 Extension MB (with focas knob)

●MF band A
The feelin in which MF of a zoom lens is calm and smooth.

●E90M port MB

●16FC Extension MB

●Various F-Z gear

●Adjustable grip set

●Flip lens adaptor M67
●Flip lens adaptor port
●M10 ball joint L60
●M10 ball joint L80

●Supplies of O-ring and gease parts, etc

CHARACTERISTICS OF THIS UNIT

・ This is a housing built especially for Sony' s α7, α7R, and α7S digital still camera.

・ When your camera is mounted inside this housing, you can take photographs underwater, in adverse weather conditions, such as snow or rain, or where water spray may come in contact with it.

・ It is necessary to use different ports for different lenses.

・ Flat Cover(or you may choose a slant cover for no additional cost)
You may choose a viewfinder from INON, Inc. (Options)
Models to choose from are: 45° Viewfinder unit for the X-2; Viewfinder window unit for the X-2; straight viewfinder unit for the X-2 (may produce slight vignetting)

・ Slant Cover (or you may choose a flat cover for no additional cost)
The tilt monitor can be adjusted up to 45°from vertical.
The function levers are easier to find when underwater.

・ Monitor hood rail
The monitor hood (Optional) mounts on an upright rail on the left side of the liquid crystal display and is operated by moving it up and down to increase monitor visibility in a bright sea.
It can also be equipped with a simple method of increasing visibility, a convex lens (from the UN, Co. The Underwater Monitoring Pro for MARK II UNZ-2603 can be used).

・ Extension Key (Playback button)
The playback button is located in a somewhat deep location.
If the "Auto Review" function is set to ON, it takes 2 seconds to display the photo, and it is possible that you might miss a photo op. We highly recommend that users be aware of this key.

・ Shutter Release Lever
The shutter release is operated with an easy-to-recognize trigger-shaped lever.

・ Mount Base
Five different types of direct base adaptors can be attached on one mount.
(Shoe base adaptor X-2; multi-direct base; direct base,; T-slide base; M10 ball joint base.)

・ Hole for attaching the M10 ball joint base.
The M10 ball joint base allows you to expand to strobes or lights.
There is also a hole for applying a stay.

・ ON/OFF Lever for the external strobe
It is easy to feel with the fingers. (Be sure to check this key when inserting the camera.)

・ Tripod
There is one hole in the bottom of the body which can be used to attach a tripod for steadier shooting.

・ M14 Accessory Sync Cord Port (2 places)
On top of the bulge for the strobe you will find an accessory port for attaching a hot shoe.
Please buy separately a bulkhead receptacle suitable for a Nikonos V sync cord plug. (Such as the 25020 Canon Hot Shoe Nikonos Bulkhead receptacle from Nauticam, etc.)
The port on the bottom is for attaching a monitor or other recorder. (You will also need accessories such as an L-type HDMI cable, a Shogun recorder, housing for the recorder, etc.)

・ MultiMount
An optional accessory attached to the top of the grip.
In addition to the flash in the camera body, a total of five LED lights or strobes can be attached.

SPECIFICATIONS

Type of camera	SONY α7, α7R, αS
Materials	Corrosion resistant aluminum; Polycarbonate; SUS, POM, Silicon Rubber
Surface Production	Durable color alumite (16 colors available to application tothe body, the back door and the port)
Pressure testing	Pressure tested to 100m.(The dome port from INON, Inc. is pressure tested to a depth of 75m)
Size:	Approx. 306mm wide X 180cm high X 152cm deep (Includes projecting portions of the grip, etc. No port.)
Weight on land	Approx. 1546g (including body, Flat cover,Grip not inculuding camera and battery)
Weight underwater	Approx. 420g (including body, slant cover, 2870 port, grip, lens, camera and battery)
Back Door	Sealed with a double O-ring seal
Temperature limits	Use between 0 and 40C
Tripod Screws	One (use only screws of less than 7.0mm in length)
Package Includes:	APSO-A7 housing Sync Cord connector, adaptor (for attaching 2・4 strobes) Three urethane screws A 2-hole rubber bushing ※1 Extra O-rings (main, sub and port one each) Special grease Manuals and instructions

※This product may be altered in operation or in appearance at any time without prior announcement to the public.

CUSTOMER SUPPORT

For questions on how to use this product or technical issues, please contact our Customer Service Representative

Email: info@acquapazza.jp

For more detailed information, please visit our home page at http://acquapazza.jp/

Operations Division, ACQUAPAZZA Operations Division
Yamamoto Industry Co.,LTD.
2-318, Nishi Ajima, Kita-Ku, Nagoya City Aichi Prefecture 〒462-0016

ACQUAPAZZA